



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,472	01/29/2004	Akira Yoshihaga	008312-0307912	3738

909 7590 12/21/2007
PILLSBURY WINTHROP SHAW PITTMAN, LLP
P.O. BOX 10500
MCLEAN, VA 22102

EXAMINER

MOFFAT, JONATHAN

ART UNIT	PAPER NUMBER
----------	--------------

2863

MAIL DATE	DELIVERY MODE
-----------	---------------

12/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/766,472	YOSHINAGA ET AL.	
	Examiner	Art Unit	
	Jonathan Moffat	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 13 November 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,3 and 4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,3 and 4 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s), including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Response to Amendment

Applicant's amendments to the claims, filed 11/13/2007, in association with the Request for Continued Examination also filed on that day are accepted and appreciated by the examiner. Applicant has canceled claim 2 and amended each independent claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1 and 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riedel (US pat 5870698) in view of Tuszynski (US pat pub 20030176938).

With respect to claim 1, Riedel discloses a stand-alone (column 2 lines 39-43) apparatus comprising:

- 1) A unit which inputs a state of an operating quality for a change in the operating condition (Fig 2 items 102 and 114).
- 2) A storage process unit which stores history data indicative of the change in the operating condition and the state of the operating quality corresponding to the change (column 7 line 56 – column 8 line 30).
- 3) A unit which displays the history data (Fig 1 item 24).

With respect to claim 4, Riedel discloses a stand-alone (column 2 lines 39-43) apparatus comprising:

1) A communication unit which gains access to a display device of an injection molding machine (Fig 3) operated in accordance with an operating condition through a communication medium (Fig 4 item 208).

2) A unit which reads history data indicative of a change in the operating condition and a state of an operating quality corresponding to the change in the operating condition from the display device using the communication unit (Fig 4 item 208).

3) A unit which stores the history data (Fig 4 item 210).

With respect to claims 1 and 4, Riedel fails to disclose that the storage process unit records data indicative of product identification data indicating a product produced by the injection molding machine, in accordance with the change in the operating condition and the history data corresponding to the product identification data.

Tuszynski teaches, with respect to claims 1 and 4, that the storage process unit records data indicative of product identification data indicating a product produced by the injection molding machine (paragraphs 0111 and 0166), in accordance with the change in the operating condition and the history data corresponding to the product identification data (paragraphs 0006, 0164 and 0166).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the apparatus of Riedel by correlating deviations in injection processes to the products produced as taught by Tuszynski. Riedel discloses independent configuration data for each mold type (column 2 lines 56-67 and column 8 lines 42-57) indicating the desire to control the molding process properties according to the item to be produced. Further, Riedel discloses storing history data including errors (changes and deviations from desired values) (column 7 line

57 - column 8 line 30). In reviewing these references together, one of ordinary skill in the art would understand that the properties and quality of the molded item are impacted by the properties and measured performance parameters of the injection molding process. One of ordinary skill in the art would find it both obvious and desirable to identify which specific items were produced under which conditions as a way to effect quality control over these items.

2.

Claims 1 and 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang (US pat 5461570) in view of Tuszynski (US pat pub 20030176938).

With respect to claim 1, Wang discloses an apparatus comprising:

- 1) A unit which inputs a state of an operating quality for a change in the operating condition (Fig 1 items 11-20 and 22).
- 2) A storage process unit which stores history data indicative of the change in the operating condition and the state of the operating quality corresponding to the change (Fig 1 storage in item 100 and Figs 4b, 11, 13a-13b, 14-16a).
- 3) A unit which displays the history data (Fig 1 items 404 405).

With respect to claim 2, Wang discloses that the storage process unit records data indicative of product identification data indicating a product produced by the injection molding machine (Fig 20 and column 8 lines 55-67) in accordance with the change in the operating condition and the history data corresponding to the product identification data (Figs 13a-b items 660 660').

With respect to claim 3, Wang discloses that the history data and the product identification data are used for assisted software for assisting an operating condition setting operation (Figs 13a-b items 660 660' and figs 14-16b).

With respect to claim 4, Wang discloses an apparatus comprising:

- 1) A communication unit which gains access to a display device of an injection molding machine (Fig 20 and column 8 lines 55-67) operated in accordance with an operating condition through a communication medium (Fig 1 item 99).
- 2) A unit which reads history data indicative of a change in the operating condition and a state of an operating quality corresponding to the change in the operating condition from the display device using the communication unit (Figs 1, 6 and column 8 lines 8-35). Specifically the supervisory subcomponents that request and collect data from other subcomponents.
- 3) A unit which stores the history data (storage icon in the supervisor node Fig 1).

With respect to claims 1 and 4, Wang fails to disclose that the storage process unit records data indicative of product identification data indicating a product produced by the injection molding machine, in accordance with the change in the operating condition and the history data corresponding to the product identification data.

Tuszynski teaches, with respect to claims 1 and 4, that the storage process unit records data indicative of product identification data indicating a product produced by the injection molding machine (paragraphs 0111 and 0166), in accordance with the change in the operating condition and the history data corresponding to the product identification data (paragraphs 0006, 0164 and 0166).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the apparatus of Wang by correlating deviations in injection processes to the products produced as taught by Tuszynski. Wang discloses independent configuration data for each mold type (Fig 5b) and measured quality data for each molded item (Fig 4b) indicating the desire to control the molding process properties according to the item to be produced. Further, Wang discloses storing history data including defects in each molded item (Fig 4b). In reviewing these references together, one of ordinary skill in the art would understand that the properties and quality of the molded item are impacted by the properties and measured performance parameters of the injection molding process. One of ordinary skill in the art would find it both obvious and desirable to identify which specific items were produced under which conditions as a way to effect quality control over these items.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Moffat whose telephone number is (571) 272-2255. The examiner can normally be reached on Mon-Fri, from 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

12/10/07
JM/jm

John E. Barlow, Jr.
JOHNE. BARLOW, JR.
PRIMARY EXAMINER
GROUP 2800